

Job Name: _____ Location: _____
 Drawing Reference: _____ Schedule No. _____
 System No.: _____ Date: _____

OUTDOOR VRFZ HEAT RECOVERY SYSTEM FEATURES

- 3-phase, 208/230V systems
- Modular variable refrigerant flow zoning (VRFZ) systems; smaller capacity units can be piped together to form a single, large-capacity two-pipe system
- Compact size for each outdoor module; can be transported through standard-sized doorways for installation
- Required Twinning Kit allows for easy field piping connection
- Selectable fan static, 0.12 or 0.24"WG external static pressure; factory set to 0"WG
- Max. Total Refrigerant Piping Length: 1,804' (P72,96); 1,969' (P120,144,168); 2,461' (P192); 2,625' (P216,240); Max. Line Length: 541'; Max. Control Wiring Length: 1,650'
- Connects to CITY MULTI indoor units; controlled via CITY MULTI Controls Network (CMCN)
- External finish: Pre-coated Galvanized-steel Sheets with thermoset polyester-resin
- Operating Temperature Range
 Cooling (Outdoor): 23° ~ 109°F (-5° ~ +43°C) DB
 Heating (Outdoor): -4° ~ +60°F (-20° ~ +16°C) WB



PURY-P96THMU-A-BS PURY-P96THMU-A-BS

INVERTER



OPTIONAL PARTS

- Twinning Kit*.....CMY-R100VBK
 - Branch Joint (T-Branch: ≤ 72,000 Btu/h).....CMY-Y102S-G2
 - Branch Joint (T-Branch: 73,000-144,000 Btu/h).....CMY-Y102L-G2
 - Joint Adapter (Port Connector>54,000 Btu/h).....CMY-R160J
 - Main BC Controller.....CMB-P108/1010/1013/1016NU-GA
 - Sub BC Controller.....CMB-P104/108NU-GB/-1016NU-HB
- * Twinning Kit is necessary to combine the refrigerant flows of the modules and is included in the outdoor unit set.

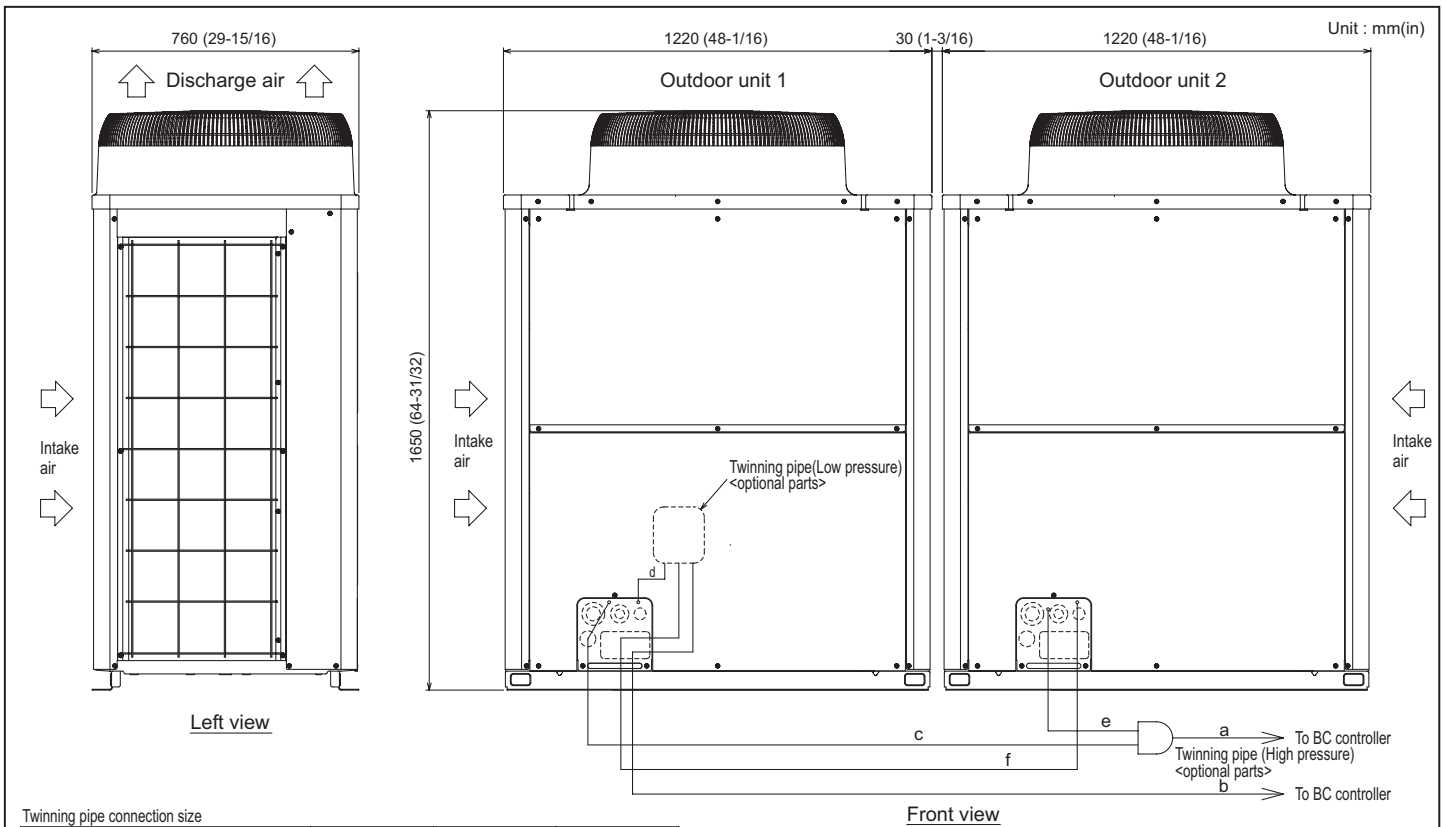
Specifications		System	Module 1	Module 2
Unit Type		PURY-P192TSHMU-A-BS	PURY-P96THMU-A-BS	PURY-P96THMU-A-BS
Nominal Cooling Capacity	Btu/h	192,000	96,000	96,000
Nominal Heating Capacity	Btu/h	200,000	108,000	108,000
External Dimensions (H x W x D)	In. / mm	Refer to Module Data	65 x 48-1/16 x 29-15/16 / 1,650 x 1,220 x 760	65 x 48-1/16 x 29-15/16 / 1,650 x 1,220 x 760
Net Weight	Lbs. / kg	1,170 / 530	585 / 265	585 / 265
Electrical Power Requirements	Voltage, Phase, Hertz	Refer to Module Data**	208-230V, 3-phase, 60Hz	
Cooling Power Input	kW	17.04	Refer to System Data	
Heating Power Input	kW	15.85	Refer to System Data	
Cooling Current (208/230V)	A	52.5 / 47.5	Refer to System Data	
Heating Current (208/230V)	A	48.8 / 44.2	Refer to System Data	
Minimum Circuit Ampacity (MCA)**	A	Refer to Module Data**	35 / 32**	35 / 32**
Maximum Overcurrent Protection (MOCP)**	A	Refer to Module Data**	40 / 40**	40 / 40**
Piping Diameter			Refer to System Data	
From Twinning Kit to Indoor Units (Brazed) (In. / mm)	Liquid (High Pressure)	7/8 / 22.2		
	Gas (Low Pressure)	1-1/8 / 28.58		
From Modules to Twinning Kit (Brazed) (In. / mm)	Liquid (High Pressure)	Refer to Module Data	3/4 / 19.05	3/4 / 19.05
	Gas (Low Pressure)	Refer to Module Data	7/8 / 22.2	7/8 / 22.2
Indoor Unit	Total Capacity	50 to 150% of ODU's	Refer to System Data	
	Model / Quantity	P06 ~ P96 / 1 to 48	Refer to System Data	
Sound Pressure Levels	dB(A)	62.0	58.0	58.0
Fan				
Type x Quantity		Refer to Module Data	Propeller Fan x 1	Propeller Fan x 1
Airflow Rate	CFM	Refer to Module Data	7,750	7,750
Direct-drive Inverter Motor Output	kW	Refer to Module Data	0.92	0.92
Compressor Operating Range		9% to 100%	Refer to System Data	
Compressor Type x Quantity		Refer to Module Data	Inverter-driven Scroll Hermetic x 1	Inverter-driven Scroll Hermetic x 1
Compressor Motor Output	kW	Refer to Module Data	7.0	7.0
Compressor Crankcase Heater	kW	Refer to Module Data	0.057	0.057
Refrigerant		Refer to Module Data	R410A	
Lubricant		Refer to Module Data	MEL32	
High-pressure Protection Device		Refer to Module Data	601 psi / 4.15 MPa	601 psi / 4.15 MPa
Compressor / Fan Protection Device		Refer to Module Data	Overheat Protection / Thermal Switch	Overheat Protection / Thermal Switch
Inverter Protection Device		Refer to Module Data	Overheat / Overcurrent Protection	Overheat / Overcurrent Protection

** Each individual module requires a separate electrical connection. Reference electrical data for each individual module.

SEACOAST PROTECTION

- External Panel Base, External Front Panel, Pillar: Alloyed galvanized-steel sheets with thermoset polyester-resin coating on internal and external surfaces
- Compressor Cover: Galvanized-aluminum sheets with thermoset polyester-resin coating on internal and external surfaces
- Electrical Parts Box: Galvanized-aluminum sheets with thermoset polyester-resin coating on external surface
- Fan Motor Support: Galvanized-steel sheets with thermoset polyester-resin coating on internal and external surfaces
- Printed Circuit Board: Epoxy resin with polyurethane-coating on external surface

Outdoor Unit: PURY-P192TSHMU-A-BS – DIMENSIONS



Twinning pipe connection size

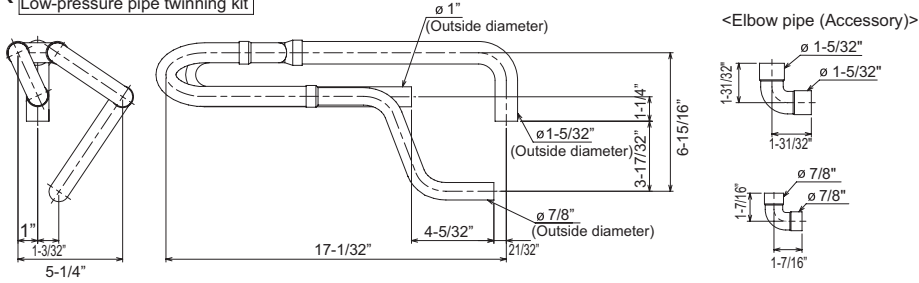
Package unit name	PURY-P192TSHMU-A(-BS)	PURY-P216TSHMU-A(-BS)	PURY-P240TSHMU-A(-BS)
Outdoor unit 1	PURY-P96THMU-A(-BS)	PURY-P120THMU-A(-BS)	PURY-P120THMU-A(-BS)
Outdoor unit 2	PURY-P96THMU-A(-BS)	PURY-P96THMU-A(-BS)	PURY-P120THMU-A(-BS)
Outdoor Twinning Kit(optional parts)	CMY-R100VBK		
BC controller - Twinning pipe	High pressure	a	ø22.2(7/8)
	Low pressure	b	ø28.58(1-1/8)

Twinning pipe ~ Outdoor unit	Unit model	High pressure	Low pressure
		c or e	d or f
P96	P96	ø19.05(3/4)	ø22.2(7/8)
	P120	ø19.05(3/4)	ø28.58(1-1/8)

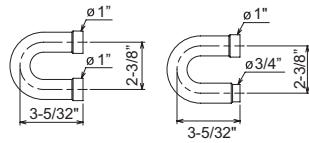
- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
 2. Twinning pipe (high pressure) should not have a side-to-side angle of more than 15 degrees.
 3. Refer to the Installation Manual for details of the Twinning pipe installation.
 4. The straight length of piping before the Twinning pipe (section "a" in the figure) must be at least 500mm(19-11/16) (*including the straight pipe supplied with the Twinning pipe).
 5. Use only the Twinning pipes manufactured by Mitsubishi (optional parts).

Twinning Kit: CMY-R100VBK

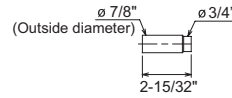
CMY-R100VBK Low-pressure pipe twinning kit



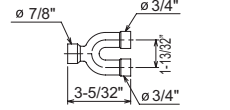
<Low-pressure pipe twinning kit (Accessory)>



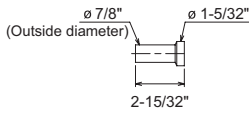
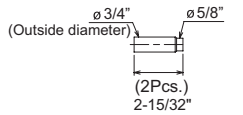
<Reducer pipe (Accessory)>



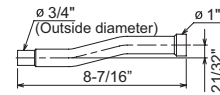
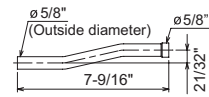
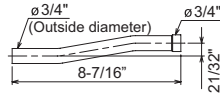
High-pressure twinning pipe



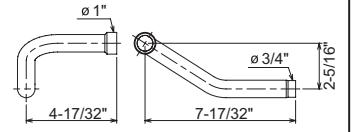
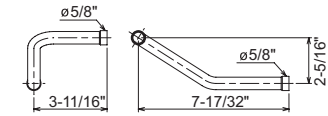
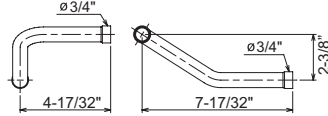
<Reducer pipe (Accessory)>



<Pipe for routing through the bottom (Accessory)>

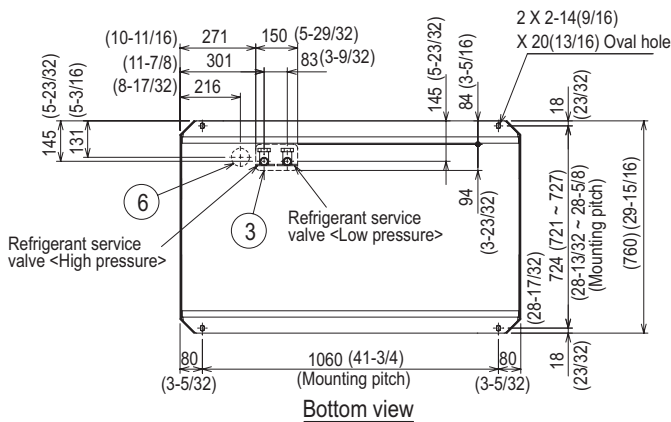
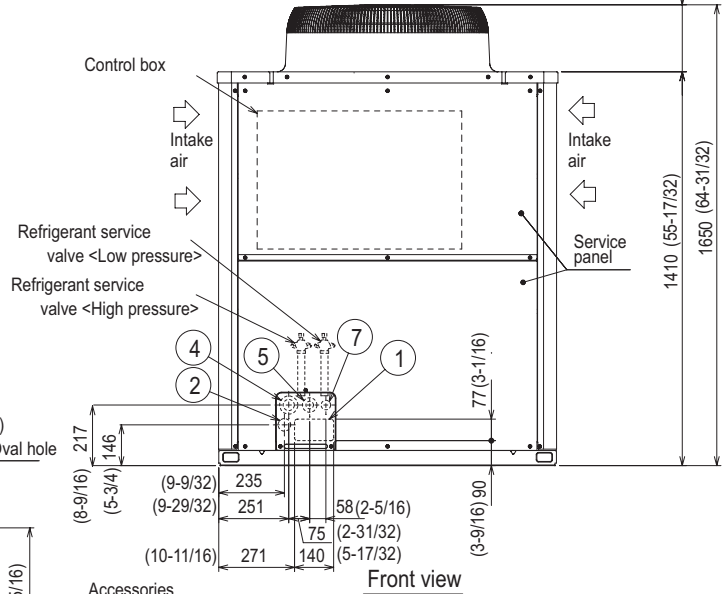
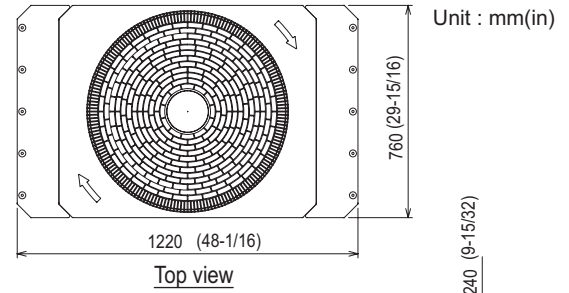
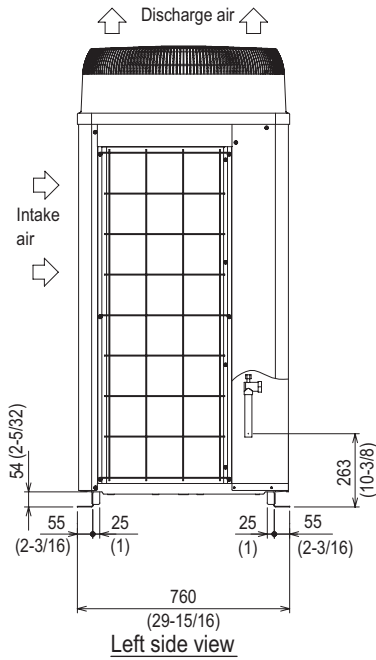


<Pipe for routing through the front (Accessory)>



For instructions on piping the units together using the twinning kit, see the Installation Manual.

Modules 1 and 2: PURY-P96THMU-A-BS – DIMENSIONS



- Accessories
- Connecting pipe
 - Low pressure
 - Pipe (IDø25.4 [1] X IDø22.2 [7/8]).....P96 1 pc.
 - Pipe (IDø25.4 [1] X IDø28.58 [1-1/8]).....P120 1 pc.
 - High pressure
 - Pipe (IDø25.4 [1] X ODø19.05 [3/4]).....P96, P120 1 pc.
 - Elbow (IDø19.05 [3/4] X ODø19.05 [3/4]).....P96, P120 1 pc.

Note 1. Refer to the Engineering or Installation manual for information regarding necessary clearance around the unit, and installation site requirements.
 2. When brazing the pipes, protect the refrigerant service valve by wrapping it with a wet cloth to keep its temperature under 120°C (248°F).

Connecting pipe specifications

Model	Connection specifications for the refrigerant service valve *1	
	High pressure	Low pressure
PURY-P96THMU (-BS)	ø19.05 Brazed (3/4)	ø22.2 Brazed (7/8)
PURY-P120THMU (-BS)		ø28.58 Brazed (1-1/8)

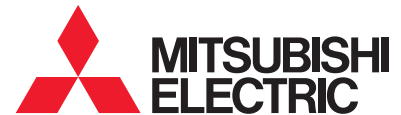
*1. Use only the supplied connecting pipes (for bottom and front piping).

NO.	Usage	Specifications
①	Front access hole	140 X 77 Knockout hole (5-17/32)(3-1/16)
②	For pipes	Front access hole (Use when twinning kit (optional parts) is mounted.)
③	Bottom access hole	ø45 Knockout hole (1-25/32)
④	For wires	150 X 94 Knockout hole (5-29/32)(3-23/32)
⑤	For wires	Front access hole ø62.7 or ø34.5 Knockout hole (2-15/32) (1-3/8)
⑥	For wires	Front access hole ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑥	Bottom access hole	ø65 Knockout hole (2-9/16)
⑦	For transmission cables	Front access hole ø34 Knockout hole (1-11/32)



Mitsubishi Electric Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of quality warranties for the production of refrigeration and air conditioning equipment.

ISO Authorization System
 The ISO 9000 series is a plant authorization system relating to quality warranties as stipulated by the ISO. ISO 9001 certifies quality warranties based on the "design, development, production, installation and auxiliary services" for products built at an authorized plant.



HVAC Advanced Products Division
 Mitsubishi Electric & Electronics USA, Inc.

3400 Lawrenceville Suwanee Rd.
 Suwanee, GA 30024
 Tele: 678-376-2900 • Fax: 800-889-9904
 Toll Free: 800-433-4822 (#4)
 www.mehvac.com

Specifications are subject to change without notice.



Mitsubishi Electric Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO).